J. PATTERSON.

Machine for Stamping or Beetling Textile Fabrics.

No. 211,520. Patented Jan. 21, 1879.

FIG. 2.

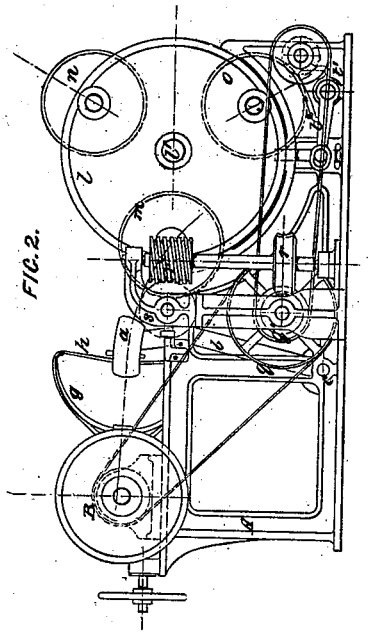


FIG. 1.

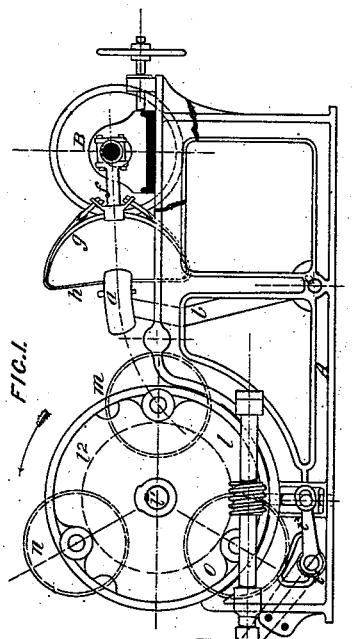
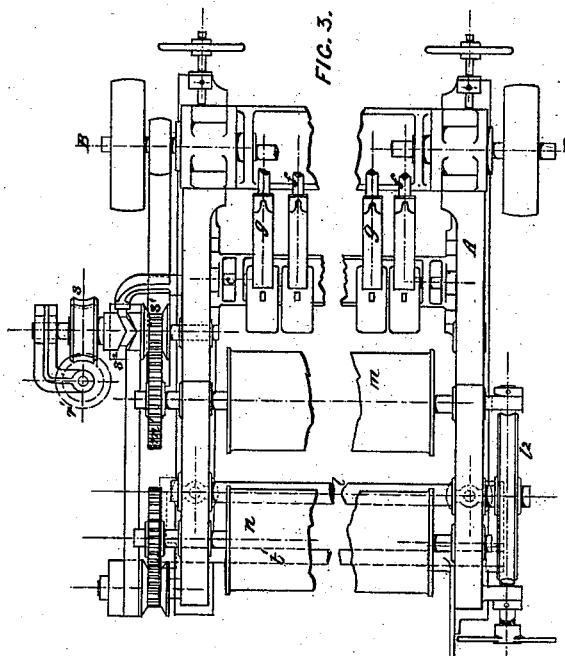


FIG. 3.



Witnesses;

Solon C. Kemon

Chas. A. Pettit

Inventor:

John Patterson

By Munn & Co

Attorneys.

UNITED STATES PATENT OFFICE.

JOHN PATTERSON, OF BELFAST, IRELAND.

IMPROVEMENT IN MACHINES FOR STAMPING OR BEETLING TEXTILE FABRICS.

Specification forming part of Letters Patent No. **211,520**, dated January 21, 1879; application filed April 3, 1878; patented in England, February 27, 1871.

To all whom it may concern:

Be it known that I, JOHN PATTERSON, of Belfast, in the county of Antrim, in Ireland, merchant, have invented certain new and useful Improvements in Machines for Stamping or Beetling Textile Fabrics or Fibers or other substances; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the annexed drawing, forming part of this specification.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

Figure 1 is a side elevation, partly in section, of my improved machinery. Fig. 2 is another elevation, taken from the other side of the machine, and Fig. 3 a plan of the same.

A are the side standards, to which are fixed pedestals supporting the shaft B, which is driven by steam or other power. On this shaft are as many cranks as there are stampers in the beetle. The cranks give motion to the stampers *a* by means of bridles and rods *f*, the springs *g*, fixed to the ends of the rods *f*, and the leather or other straps *h*, which pass through slots in the stampers and are tightened up by set-screws. The stampers *a* are made, by preference, of a cast-iron block fixed to the vibrating lever *b*, mounted on the fulcrum-shaft *c*.

The fabric or other substance to be beetled is wound on either of the beams *m*, *n*, or *o*. The axles of these beams are supported in bearings in the disks *l*, which are keyed on the central axle l^1. The disks *l* are supported in the side standards. During the operation of beetling the beam *m* is turned slowly round on its axis by a power from a pulley on the driving-shaft B. This pulley drives the pulley *q*, fixed to the same shaft as the worm *q'*, gearing into the wheel *r* on the same upright shaft as the worm *r'*, gearing into the wheel *s*, which is fixed to the same shaft as the flanged pinion s^1, gearing into the wheel *m'*, keyed on the axle of the beam *m*.

A lateral to-and-fro motion is given to the beam *m*, during the operation of beetling, by means of the diagonal grooved boss s^2, fast to the flanged pinion s^1, the groove of the said boss fitting a bowl or friction-pulley, the stud of which is free to revolve in a bracket fixed to one of the side standards. The disks *l* are provided with three notches, one near each bearing of the beams *m*, *n*, and *o*. The object of these notches is to hold the disks rigid while the fabric is being beetled. The lever *t* is fixed to the cross-shaft t^1, on which are the levers t^2, each of which acts on a shot-bolt taking into the said notches.

The mode of operation is as follows: The fabric to be beetled is wound on the beam *m*, and so long as the driving-strap is on the fast pulley, on the shaft B, the stampers will act on the fabric. While the fabric is being beetled on the beam *m* the fabric that has been beetled is unwound by any suitable means off the beam *n*, and as fast as the fabric is unwound off this beam either the same or other fabric is wound on the beam *o*. The disks *l* are turned round in the direction of the arrow by a worm gearing into the wheel l^2, (see Fig. 1) or otherwise; but before turning the disks *l* the attendant, by moving the lever *t*, withdraws the shot-bolts from the notches in the disks *l*.

Having thus stated the nature and particulars of my invention, I declare that what I claim herein as new, and desire to secure by Letters Patent of the United States, is—

The combination, with stampers *a*, of the vibratory levers *b*, the flexible straps *h*, the springs *g*, and the reciprocating rods *f*, and actuating mechanism, as and for the purpose specified.

In testimony whereof I have hereto set my hand before two subscribing witnesses.

JOHN PATTERSON.

Witnesses:

GOODWIN YOUNG,

3 *Old Square, Lincoln's Inn, Barrister-at-Law.*

A. HENRY PATTERSON,

3 *Old Square, Lincoln's Inn, in the county of Middlesex, Barrister-at-Law.*